

10/529,619

P-2442/CIP

REPLY

The Examiner rejected claims 34 and 37 under 35 USC §102(b) as being anticipated by Smith et al (5,470,323) or in the alternative under 35 USC §103(a) as being obvious over Smith et al in view of Hack et al (5,874,066).

The Examiner rejected claims 38-40 under 35 USC §103(a) as being unpatentable over Smith et al in view of Hack et al and further in view of Discko (6,049,934).

Smith et al discloses a package system with tandem applicator pads for topical drug delivery. Two applicator pads 20, 22 are attached to the surface of a support sheet 14. A seal 34 may be provided between pads 20 and 22 in order to divide the compartment into two sub-compartments. The applicator pads 20 and 22 are arranged in a separated array on a support sheet 14. Each pad contains at least one active ingredient, preferably in combination with a suitable carrier vehicle.

Hack et al discloses a treatment for tooth hypersensitivity comprising a two-step method using a first solution of calcium or strontium salt and a second solution of a potassium oxalate.

Discko discloses a disposable dental applicator.

The present invention relates to a pre-dosed dental desensitizing system that is sealed in a package with first and second applicators that are pre-dosed with a dry, inactive dental

10/529,619

P-2442/CIP

desensitizer. The claims in the application now recite more specific features of the applicator and in particular that a non-absorbent flock material is used with the applicator portion. In the present invention, the dental desensitizer material is coated and dried on the exterior of the fibers of the non-absorbent flock material. This results in no expansion during reactivation, and the reactivation being accomplished much more quickly. The dental desensitizer material is also more completely dispensed. Because the dental desensitizer material is coated on the fibers of the flock material and not absorbed into the interior, the reactivation is quicker. The material is also dispensed more completely from the surface of the non-absorbent flock material with less material being retained that is not accessible.

The package system disclosed in Smith uses pads for topical drug delivery, and could not be adapted for delivery of a dental desensitizer in the small confines of a patient's mouth. Accordingly, the present invention is not formed by the teachings of Smith et al and Hack et al in that neither of these references, even if combined, would form the present invention as claimed, in that a dry and inactive desensitizer material is placed on and coats a flock material on the applicator end portion. Accordingly, the present invention makes possible the use of a sealed package that does not require the structural

10/529,619

P-2442/CIP

integrity needed to contain a liquid or a moist applicator as disclosed in Smith et al.

Claim 39 has been amended to recite that the first applicator is placed in the first chamber so as to be unattached to the sealed package and is readily removable from the sealed package. Smith et al teaches that the applicator pads are attached to the surface of the support sheet 14, therefore the packaging system disclosed in Smith et al would not be applicable to an applicator having an elongated handle that is unattached to the sealed package as recited in amended claim 39. Additionally, because the applicator pads disclosed in Smith et al are attached to the surface of the support sheet 14, the relatively large pads could not be used in the small confines of a patient's mouth.

New claim 41 has been added to more particularly define an embodiment of the invention. New claim 41 recites more precisely and specifically the structure of the multi-chamber package and the unique applicator with flock material having the dehydrated dental desensitizer dried and coated thereon.

The inventor has discovered that by using a non-absorbent flock material that is coated with a dried or dehydrated dental desensitizer material provides an improved applicator for the treatment of dental hypersensitivity. The use of a flock material results in an improved applicator for delivering a multi-part dental desensitizer material. Therefore, the present invention is

10/529,619

P-2442/CIP

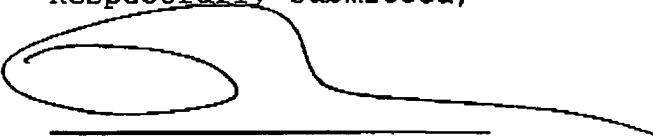
an improvement over the prior art. The present invention is something more than simply a soaked pad as disclosed in Smith et al. The use of a flock material has been discovered to be particularly advantageous in holding the dehydrated dental desensitizer within and coated on the fibers of the flock material and yet facilitates rapid reactivation and placement on a tooth to aid in the treatment of dental hypersensitivity. The pads disclosed in Smith et al would be of little to no benefit in a dental procedure performed in the tight confines of a patient's mouth. The present invention, as recited in the remaining claims, recites a flock material that does not trap the dry inactive material thereon internally, but externally on the multiple fibers of the flock material which greatly facilitates its reactivation and application on a tooth. Accordingly, much more material may be transferred from the applicator to the tooth quickly and with very little waste of material. Accordingly the present invention, in utilizing a flock material, is an improvement over the pad disclosed in Smith et al that is soaked with a moist active dermatological agent. This combination of a flock material and dried inactive dental desensitizer in and coated on the flock material to form an improved applicator would not have been obvious in view of the references cited.

10/529,619

P-2442/CIP

Accordingly, it is requested that the Examiner enter this Amendment and Reply, reconsider the present application, and indicate allowable subject matter.

Respectfully submitted,



Paul A. Fattibene
Attorney for Assignee
Reg. No. 31,694

2480 Post Road
Southport, CT 06890
Tel. (203)255-4400
Fax (203)259-0033

June 23, 2009